UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,854	03/24/2004	Jonathan Richard Milner	282552US8X	5462

22850 7590 09/11/2007		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314		RIYAMI, ABDULLA A	

ART UNIT	PAPER NUMBER
2609	

NOTIFICATION DATE	DELIVERY MODE
09/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/807,854	MILNER, JONATHAN RICHARD
	Examiner	Art Unit	
	Abdullah Riyami	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 March 2004*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,9 and 15-19* is/are rejected.

7)☒ Claim(s) *4-8 and 10-14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All   b)☐ Some * c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date *3/24/2004 and 4/18/2005*.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____ .

DETAILED ACTION

Claim Objections

1.   Claim 1-15 is objected to because of the following informalities:

In claim 1, line 7, the occurrence of "a conditional access module" seems to refer

back to "a selectively attachable conditional access module" as recited in line 2. If

this is true, it is suggested to change "a conditional access module" to --the

conditional access module--. Similar problem exists in (claim 3, line 3), (claim 4,

line 3), (claim 5, line 4), and (claim 15, line 2).

Claims 2 and 6-14 are objected to because they depend on an objected claim.

In claim 16, line 4, the occurrence of "a digital television device" seems to refer

back to "a digital television device" as recited in line 1. If this is true, it is

suggested to change "a digital television device" to --the digital television device--

. In line 4, the occurrence of "a connector" seems to refer back to " a connector"

as recited in line 1. If this is true, it is suggested to change "a connector" to --the

connector--. In line 5, the occurrence of "a selectively attachable conditional

access module" seems to refer back to "a selectively attachable conditional

access module" as recited in line 1. If this is true it is suggested to change "a

selectively attachable conditional access module" to --the selectively attachable

conditional access module--. Similar problem exists in lines 10 and 24.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-3, 9 and 15-19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chaney (6035037) in view of Slattery (US 6246701 B1).

In claim 1, Chaney discloses a common interface controller (see figure 12) for

use in a digital television device (see column 2, lines 20-30) having a connector

(see figure 12, box 190) for a selectively attachable conditional access module

(see figure 12, box 180 and 1805) for descrambling channels (see column 6,

lines 12-16) of a transport stream (see column 4, lines 55-62) as identified by

respective PIDs (see column 5, lines 1-30); the common interface

controller including:

a first input interface for a first transport stream having a first channel identifiable

by one or more first PIDs (see figure 12, box 100); a conditional access interface

for transmitting to a conditional access module transport streams having

scrambled channels (see column 15, lines 9-20) and for receiving from the

conditional access module transport streams having descrambled channels (see

column 15, lines 21-41, figure 12, box 190); wherein the common interface

controller further includes: a second input interface for a second transport stream

having a second channel identifiable by one or more second PIDs (see column 5,

lines 15-16, figure 12, box 100);

a forward multiplexer (see figure 12, box 127) for providing an intermediate data stream by time multiplexing at least a part of the first transport stream with at least a part of the second transport stream, the part of the first transport stream including the first channel and the part of the second transport stream including the second channel (see column 16, lines 23-37); and the conditional access interface being arranged to transmit the intermediate transport stream to a conditional access module for descrambling of at least the first channel and the second channel (see column 16, lines 23-37 and column 15, lines 21-41). Chaney discloses descrambling based on PID processing (see column 13, lines 52-60 and column 8, lines 9-12 and figure 4, block 474), but does not expressly disclose a PID remapper for changing the original values of the second PIDs to intermediate values not used by any PID of the at least a part of the first transport stream such that the intermediate data stream forms an intermediate transport stream.

Slattery discloses a PID remapper for changing the original values of the second PIDs to intermediate values not used by any PID of the at least a part of the first transport stream such that the intermediate data stream forms an intermediate transport stream (see column 20, lines 34-51).

Chaney and Slattery are analogous art because they are from the same field of endeavor of descrambling channels using integrated circuits.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Slattery's PID remapper processor in Chaney's common interface controller (see figure 12) device to ensure uniqueness of a PID. The motivation to combine would have been to have a remapping mechanism to overwrite the PID of the corresponding packet in order to ensure uniqueness of PID assignment. Thus, re-labeling at least one of the two types of transport packets with a new PID.

In claim 2, Chaney discloses a common interface controller (see figure 12) wherein: the PID remapper is arranged to change the original values of each PID of the channels in the at least a part of the second transport stream to respective intermediate values not used by any PID of the at least part of the first transport stream (see column 20, lines 34-51).

In claim 3, Chaney discloses a common interface controller (see figure 12) further including: a return demultiplexer (see figure 12, box 130) for receiving from the conditional access interface the intermediate transport stream descrambled by a conditional access module and for separating the at a least part of the first transport stream from the at least a part of the second transport stream (see column 15, lines 42-50).

In claim 9, Chaney discloses a common interface controller (see figure 12) further including: a primary return multiplexer (see figure 12, box 130) for receiving from the return demultiplexer (note: primary return multiplexer could also be the return multiplexer) said at least a part of the first transport stream and

for multiplexing the received at least a part of the first transport stream with the

remaining data of the first transport stream so as to output the first transport

stream having the first channel descrambled (see column 15, lines 42-50).

In claim 15, Chaney discloses a common interface controller (see figure 12)

further including: a command interface for communication with a conditional

access module (see figure 12, block 160).

In claim 16, Chaney discloses a digital television device (see figure 12 and

column 2, lines 20-30) including a connecter (see figure 12, box 190) for a

selectively attachable conditional access module (see figure 12, box 180 and

1805) for descrambling channels (see column 6, lines 12-16) of a transport

stream (see column 4, lines 55-62) and further including: a common interface

controller (see figure 12) for use in the digital television device (see column 2,

lines 20-30) having the connector (see figure 12, box 190) for the selectively

attachable conditional access module (see figure 12, box 180 and 1805) for

descrambling channels (see column 6, lines 12-16) of a transport stream (see

column 4, lines 55-62) as identified by respective PIDs (see column 5, lines 1-30)

; the common interface controller including:

a first input interface for a first transport stream having a first channel identifiable

by one or more first PIDs (see figure 12, box 100); a conditional access interface

for transmitting to a conditional access module transport streams having

scrambled channels (see column 15, lines 9-20) and for receiving from the

conditional access module transport streams having descrambled channels (see

column 15, lines 21-41, figure 12, box 190); wherein the common interface

controller further includes: a second input interface for a second transport stream

having a second channel identifiable by one or more second PIDs (see column 5,

lines 15-16, figure 12, box 100);

a forward multiplexer (see figure 12, box 127) for providing an intermediate data

stream by time multiplexing at least a part of the first transport stream with at

least a part of the second transport stream, the part of the first transport stream

including the first channel and the part of the second transport stream including

the second channel (see column 16, lines 23-37); and the conditional access

interface being arranged to transmit the intermediate transport stream to a

conditional access module for descrambling of at least the first channel and the

second channel (see column 16, lines 23-37 and column 15, lines 21-41).

Chaney discloses descrambling based on PID processing (see column 13, lines

52-60 and column 8, lines 9-12 and figure 4, block 474), but does not expressly

disclose a PID remapper for changing the original values of the second PIDs to

intermediate values not used by any PID of the at least a part of the first transport

stream such that the intermediate data stream forms an intermediate transport

stream.

Slattery discloses a PID remapper for changing the original values of the second

PIDs to intermediate values not used by any PID of the at least a part of the first

transport stream such that the intermediate data stream forms an intermediate

transport stream (see column 20, lines 34-51).

Chaney and Slattery are analogous art because they are from the same field of

endeavor of descrambling channels using integrated circuits.

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to use Slattery's PID remapper processor (see column 20, lines 34-

51 in Chaney's digital television device (see figure 12) to ensure uniqueness of a

PID.

The motivation to combine would have been to have a remapping mechanism to

overwrite the PID of the corresponding packet in order to ensure uniqueness of

PID assignment. Thus, re-labeling at least one of the two types of transport

packets with a new PID.

In claim 17, Chaney discloses a digital television device wherein the device is

one of a digital television receiver, a digital TV tuner board for a personal

computer and a Personal Video Recorder (see column 2, lines 22-27).

In claim 18, Chaney discloses a digital television device in combination with one

or more conditional access modules selectively attachable to the connector (see

figure 4 and 12).

In claim 19, Chaney discloses a method of descrambling channels (see column

6, lines 12-16) of first and second transport streams (see column 3, lines 7-25)

using a conditional access module for descrambling channels (see column 7,

lines 30-35 and figure 4, block 185) of a transport stream as identified by

respective PIDs (see column 5, lines 1-30), the method including: providing an

intermediate data stream (see figure 12, between box 127 and 190) by time

multiplexing (see figure 12, box 127) at least a part of the first transport stream

with at least a part of the second transport stream, the part of the first transport

stream including a first channel and the part of the second transport stream

including a second channel (see column 16, lines 23-37 column 15, lines 21-41);

and the intermediate data stream forms an intermediate transport stream for

processing by the conditional access module (see column 16, lines 23-37 and

column 15, lines 21-41 and figure 12, blocks 180 and 1805).

Chaney discloses descrambling based on PID processing (see column 13, lines

52-60 and column 8, lines 9-12 and figure 4, block 474), but does not expressly

disclose changing the original value of one or more PIDs identifying the second

channel to an intermediate value not used by any PID of the at least a part of the

first transport stream.

Slattery discloses changing the original value of one or more PIDs identifying the

second channel to an intermediate value not used by any PID of the at least a

part of the first transport stream (see column 20, lines 34-51).

Chaney and Slattery are analogous art because they are from the same field of

endeavor of descrambling channels using integrated circuits.

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to use Slattery's PID remapping technique (see column 20, lines

34-51) in Chaney's method of descrambling (see figure 12) to ensure uniqueness

of a PID.

The motivation to combine would have been to have a remapping mechanism to

overwrite the PID of the corresponding packet in order to ensure uniqueness of

PID assignment. Thus, re-labeling at least one of the two types of transport

packets with a new PID.

Allowable Subject Matter

4.   Claims 4-8 and 10-14 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
A	US-5,852,290 A	12-1998	Chaney, John William	235/492
B	US-5,920,572 A	07-1999	Washington et al.	370/535
C	US-2005/0105486 A1	05-2005	Robinett et al.	370/321
D	US-6,195,368 B1	02-2001	Gratacap, Regis	370/535
E	US-2005/0262537 A1	11-2005	Baran et al.	725/088
F	US-2003/0110382 A1	06-2003	Leporini et al.	713/172

All of the above are cited to show a method for descrambling transport stream

channels.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Abdullah Riyami whose telephone number is (571) 270-
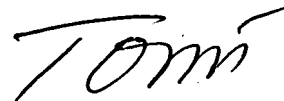
3119. The examiner can normally be reached on Monday through Thursday 8am-5pm

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dang Ton can be reached on (571) 272-3171. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR

DANG T. TON
SUPERVISORY PATENT EXAMINER